

# Combination pharmacotherapy for the management of pain (2008)

<b>Submission date</b> 29/07/2009	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 03/08/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 05/05/2016	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
MCT-94187; ANAE-151-09

# Study information

## Scientific Title

A double-blind, randomised controlled trial of nortriptyline, morphine, and their combination for neuropathic pain

## Study objectives

A combination of morphine and nortriptyline has superior analgesic efficacy versus either drug alone for reducing neuropathic pain.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Queen's University Research Ethics Board, 23/03/2009

## Study design

Double-blind randomised three-period crossover trial

## Primary study design

Interventional

## Secondary study design

Randomised cross over trial

## Study setting(s)

Hospital

## Study type(s)

Treatment

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

## Health condition(s) or problem(s) studied

Neuropathic pain

## Interventions

1. Morphine-nortriptyline combination
2. Morphine
3. Nortriptyline

As per a double-dummy, balanced Latin Square design, trial medications are administered orally in three different treatment periods. In each of the three periods, doses of nortriptyline, morphine and the two in combination are gradually titrated - over 24 days - towards each individual maximal tolerated dose and continued at that dose for seven days followed by an 11 day taper-washout period. Ceiling doses are 100 mg daily for both nortriptyline and morphine. Total duration of follow-up is 8 months.

**Intervention Type**

Drug

**Phase**

Phase IV

**Drug/device/biological/vaccine name(s)**

Morphine, nortriptyline

**Primary outcome measure**

Daily pain intensity. Patient follow-up for primary and secondary outcomes were recorded during treatment at maximal tolerated dose (i.e. day 25 - 31) for each treatment period.

**Secondary outcome measures**

1. Global pain relief, measures of sedation, constipation, other side effects and maximal tolerated drug doses
2. Short form McGill Pain Questionnaire-2
3. Brief Pain Inventory
4. Beck Depression Inventory
5. 36-item short form health survey (SF-36)
6. Blinding questionnaires
7. Acetaminophen consumption
8. Serum drug levels

Daily pain intensity. Patient follow-up for primary and secondary outcomes were recorded during treatment at maximal tolerated dose (i.e. day 25 - 31) for each treatment period.

**Overall study start date**

01/11/2009

**Completion date**

30/10/2012

**Eligibility****Key inclusion criteria**

1. Neuropathic pain
2. Daily moderate (greater than or equal to 4/10) pain for at least 3 months
3. Adults aged 18 to 89 years, either sex
4. Liver function tests: alanine aminotransferase (ALT), aspartate aminotransferase (AST) less than 1.2 times upper limit of normal
5. Creatinine less than 1.5 times upper limit of normal
6. Negative serum beta-human chorionic gonadotrophin (B-HCG) for women of childbearing potential
7. Adequate birth control for all women of child-bearing potential
8. Sufficient cognitive function, visual acuity and English language skills to complete questionnaires and communicate verbally with the nursing staff to permit titration of the study drugs

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

71

**Key exclusion criteria**

1. Painful condition as severe as, but distinct from presenting neuropathic pain
2. Pregnancy or lactation
3. End-stage kidney or liver disease
4. Moderate to severe heart disease (myocardial infarction [MI] within preceding year, unstable angina, cardiac conduction defect or congestive heart failure)
5. Cardiovascular autonomic neuropathy
6. Postural hypotension greater than 20 mmHg on initial assessment
7. Males with urinary symptoms attributable to benign prostatic hypertrophy
8. Patients who live alone and cannot assure daily contact with a friend, family member or caregiver
9. Angle-closure glaucoma
10. Ongoing administration of monoamine oxidase inhibitors, serotonin-specific reuptake inhibitors, serotonin-norepinephrine inhibitors
11. Any serious psychiatric disorder as diagnosed by a psychiatrist (including bipolar disorder)
12. Seizure disorder
13. Ongoing administration of anticonvulsants which induce cytochrome P450 enzymes (e.g. carbamazepine, oxcarbazepine, barbiturates and phenytoin) as well as rifampin
14. Hypersensitivity to, or previous intolerance of, any of the study medications
15. History of significant abuse of illicit drugs, prescription drugs or alcohol

**Date of first enrolment**

01/11/2009

**Date of final enrolment**

30/10/2012

**Locations**

**Countries of recruitment**

Canada

**Study participating centre**

Kingston General Hospital  
Kingston

Canada  
K7L 2V7

## Sponsor information

### Organisation

Queen's University (Canada)

### Sponsor details

Department of Anesthesiology  
99 University Avenue  
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### Sponsor type

University/education

### Website

<http://www.queensu.ca/>

### ROR

<https://ror.org/02y72wh86>

## Funder(s)

### Funder type

Research organisation

### Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-94187)

### Alternative Name(s)

Instituts de Recherche en Santé du Canada, Canadian Institutes of Health Research (CIHR), CIHR\_IRSC, Canadian Institutes of Health Research | Ottawa ON, CIHR, IRSC

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

Canada

## Results and Publications

### Publication and dissemination plan

Not provided at time of registration

### Intention to publish date

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/08/2015		Yes	No